THE CORPORATION OF THE TOWNSHIP OF KING
Report to Council

Monday, February 12, 2024

Public Works Department - Environmental Division
Report Number PW-ENV-2024-001
2023 Water Summary Report

RECOMMENDATION(S):

The Director of Public Works respectfully submits the following recommendation(s):

1. Report Number PW-ENV-2024-001 be received.

REPORT HIGHLIGHTS:

- Public Works Department has prepared an Annual Report for each of the four (4) municipal drinking water systems as required under Section 11 of O.Reg.170/03.
- The Township of King continues to provide safe municipal drinking water to residents, businesses, and visitors through the Ansnorveldt, King City, Nobleton, and Schomberg water distribution systems.
- The Township continues to meet or exceed all legislated requirements as an accredited operating authority.
- Regulatory sampling within the Township met all applicable requirements with the exception of six (6) Adverse Water Quality Incidents (AWQI).
- Current operational performance and the on-going implementation of the Township's Quality Management System for Drinking Water is effective.

PURPOSE:

This report is to inform Council that the Public Works Department has prepared an Annual Report for the four (4) Municipal Drinking Water Systems as required under Section 11 of O.Reg.170/03 using the standard Ministry of the Environment Conservation and Parks (MECP) templates. Annual Reports will be posted on the Township website and are available to the public at no cost. This report also fulfills the requirement to provide members of Council with an Annual Summary Report as outlined in Schedule 22 of O.Reg.170/03.

BACKGROUND:

Annual Summary Report for Council

The Annual Summary Report is to enable the owner of the water systems to assess the capability of meeting the existing and planned uses of the systems. The required contents of the Summary Report for municipal Council members are specified in Schedule 22 of O.Reg. 170/03.

The Summary Report must provide the following information to decision makers:

1. List the requirements of the Safe Drinking Water Act (SDWA), the regulations, the system's approval, drinking water works permit, municipal drinking water license, and any orders applicable to the system that were not met at any time during the period covered by the report.
2. For each requirement that was not met, specify the duration of the failure and the measures that were taken to correct the failure.
3. A summary of the quantities and flow rates of the water supplied during the period covered by the report, including monthly average and maximum daily flows.
4. A comparison of the summary referred to in point (3) to the rated capacity and flow rates approved in the system's approval, drinking water works permit or municipal drinking water license, or if the system is receiving all of its water from another system under an agreement pursuant to subsection 5 (4) of O.Reg. 170/03, to the flow rates specified in the written agreement.

This Summary Report for council members will be made available on the Township website and copies will be available free of charge from the Public Works Department.

Standard of Care Provision of the Safe Drinking Water Act (SDWA)

The statutory standard of care is outlined within section 19 of the SDWA, and states every owner of a municipal drinking water system or any person who oversees the operating authority or exercises decision making authority, shall:

- Exercise the level of care, diligence and skill in respect of a municipal drinking water system that a reasonably prudent person would be expected to exercise in a similar situation; and
- Act honestly, competently and with integrity, with a view to ensuring the protection and safety of the users of the municipal drinking water system.

Failure to comply with section 19 of the SDWA is an offence and could result in the prosecution of an individual, corporation or both.

ANALYSIS:

King City

System Description

The King City Drinking Water System (DWS) currently services a population of approximately 7,167 people, consists of roughly 77 kilometers of watermains and approximately 2,455 connections. The King City system is classified as a Large Municipal Residential System – Class 1.

Water Quality

The King City DWS experienced the following adverse water quality incidents within the reporting year (AWQI):

- Sample collected on July 10th, 2023 at Sample Station 9 James Stokes Court, revealed a presence of Total Coliform through analysis conducted on July 11th. Corrective actions were undertaken on July 11th and resamples were collected July 11th and 13th, 2023. Resamples came back clear.
- Sample collected on July 10th, 2023 at Sample Station 8 Austin Rumble Court, revealed a presence of Total Coliform through analysis conducted on July 11th. Corrective actions were undertaken on July 11th and resamples were collected July 11th and 13th, 2023. Resamples came back clear.

- Sample collected on July 17th, 2023 at Sample Station 6 Tatton Court, revealed a presence of Total Coliform through analysis conducted on July 19th . Corrective actions were undertaken on July 19th and resamples were collected July 19th and 20th, 2023. Resamples came back clear.

Water Systems Capacity Assessment

The maximum daily flow of 5,981 m³ occurred on June 4, 2023 with an overall average daily flow of 2,592 m³, for the reporting period from January 2023 to December 2023 (statistical flow data provided by York Region).

Water System Upgrades/Repairs

There were eight watermain leak repairs required in the King City DWS they have been summarized below:

- 2023-03-14 Watermain Repair, 270 Forde
- 2023-03-21 Watermain Repair, 166 Patricia Dr
- 2023-04-15 Watermain Repair, 47 Patton
- 2023-05-09 Watermain Repair, 236 Elizabeth Grove
- 2023-06-07 Watermain Repair, 27 Patton
- 2023-08-24 Watermain Repair, 142 Manitou Dr
- 2023-10-06 Watermain Repair, King Road and Alex Campbell
- 2023-10-16 Watermain Repair, 236 Elizabeth Gr

In 2023, approximately 2.2km of watermain were replaced in King City south east.

In the reporting year there was approximately 6.97km of new watermain authorized for future alterations within the drinking water system.

Nobleton Drinking Water System

System Description

The Nobleton DWS currently services a population of approximately 6,089 people, consists of approximately 48 kilometers of watermains with approximately 2,086 connections. The Nobleton system is classified as a Large Municipal Residential System – Class 1.

Water Quality

Regulatory sampling within Nobleton met all applicable requirements. There were no Adverse Water Quality Incidents in 2023.

Water Systems Capacity Assessment

The maximum daily flow of 4,415m³ occurred on May 29, 2023 with an overall average daily flow of 1,938 m³, for the reporting period from January 2023 to December 2023 (statistical flow data provided by the Region of York).

Water System Upgrades/Repairs

There were zero watermain leak repairs required within Nobleton, in 2023.

Schomberg Drinking Water System

System Description

The Schomberg DWS services a population of approximately 2,496 people, consists of approximately 16 kilometers of watermains and approximately 855 connections. The Schomberg system is classified as a Large Municipal Residential System – Class 1.

There are 6 residential service connections within the Schomberg DWS that service residents of the Town of New Tecumseth on the North side of Highway 9. Staff will forward a copy of the Annual Water Quality Report for Schomberg to the Town of New Tecumseth.

Water Quality

The Schomberg DWS experienced the following adverse water quality incident (AWQI):

- Adverse sample collected for disinfection residual was collected on April 11th, 2023. The combined chlorine exceeded the maximum allowable concentration of 4.0mg/L. Resampling was conducted at all stations, and consultation with York Region was undertaken to determine disinfection residual was within the regulatory limits.
- Sample collected on July 17th, 2023 at Sample Station 2 Cooper Drive, revealed a presence of Total Coliform through analysis conducted on July 19th. Corrective actions were undertaken on July 19th and resamples were collected July 19th and 20th, 2023. Resamples came back clear.
- Sample collected on July 17th, 2023 at Sample Station 6 End of Roselena, revealed a presence of Total Coliform through analysis conducted on July 19th. Corrective actions were undertaken on July 19th and resamples were collected July 19th and 20th, 2023. Resamples came back clear.

There is an enhanced monitoring and sampling program established with the Township and York Region to closely monitor and manage the nitrification challenges within the Schomberg DWS. The Township continues to flush the watermain as required.

The Schomberg DWS was granted approval from the Ministry of the Environment, Conservation and Parks (MECP) to increase the maximum allowable concentration of chloramines. This is reflected in Schedule D of Schombergs' Municipal Drinking Water License, Issue 4.

York Region is currently working on a biological filtration pilot project, to revise the current treatment processes/technologies in place within the Schomberg system to better address nitrification concerns.

Water Systems Capacity Assessment

The maximum daily flow of 2,362 m^3 occurred on August 3, 2023 with an overall average daily flow of 1,796 m^3, for the reporting period from January 2023 to December 2023 (statistical flow data provided by the Region of York).

Water System Upgrades/Repairs

There were zero watermain leak repair required within Schomberg, in 2023.

Ansnorveldt Drinking Water System

System Description

The Ansnorveldt DWS services a population of approximately 158 people, consists of roughly 1.4 kilometers of watermains and approximately 62 connections. The Ansnorveldt system is classified as a Small Municipal Residential System – Class 1.

Water Quality

Regulatory sampling within Ansnorveldt met all applicable requirements. There were no Adverse Water Quality Incidents in 2023.

Water Systems Capacity Assessment
The maximum daily flow of 108m³ occurred on July 22, 2023 with an overall average daily flow of 39m³, for the reporting period from January 2023 to December 2023 (statistical flow data provided by the Region of York).

Water System Upgrades/Repairs
There were no repairs or upgrades within the Ansnorveldt DWS.

Water Systems Capacity Assessment
The Township of King receives all its drinking water from York Region. The Township does not have a written agreement with York Region that specifies flow rates or limits for the provision of drinking water and therefore is not able to provide a comparison under Schedule 22 of O.Reg. 170/03.

2023 MECP Inspection
The MECP completed inspections on all four drinking water systems in 2023. There was one non-conformance identified within the Schomberg DWS, and one recommendation for the Ansnorveldt DWS. No recommendations or non-conformances were made for Nobleton and King City DWS.

The Schomberg DWS was issued one non-conformance, per below:
An adverse water quality incident was not reported in accordance with O.Reg 170/03 16-6. A combined chlorine residual exceeded the maximum allowable concentration on April 11th, the incident was not reported to the MECP and Ministry of Health immediately. The non-compliance was issued on January 17th, 2024. The non-compliance required a comprehensive review of procedures and training for staff involved in the sampling and reporting of disinfection residuals. Corrective Actions for the non-compliance were completed on January 24th, 2024 and submitted to the MECP.

The Ansnorveldt DWS was issued one recommendation, per below:
There is a reported thirty percent of water loss on an annual basis within the DWS. It is recommended that the Township formalize its efforts to determine to a relatively high degree of the water loss in the system.

Municipal Drinking Water License Program
Accreditation
External audits inform the accreditation process under the Drinking Water Quality Management Standard (DWQMS). To maintain accreditation ongoing assessment and evaluation by a third-party is required.

The Township received re-accreditation by SAI Global in July 2022. A surveillance audit was conducted on May 9th, 2023 . The Audit identified zero non-conformities and provided two Opportunities for Improvement that have since been implemented. As such, accreditation can continue to be offered to the Township.

Municipal Drinking Water Licenses (MDWL)
No updates during this reporting period for the following MDWLs:

- King City License: 121-103 Issue 3
- Nobleton License: 121-102 Issue 3
- Schomberg License: 121-101 Issue 4
- Ansnorveldt License: 121-104 Issue 3

Drinking Water Works Permits (DWWP)

No updates during this reporting period for the following DWWPs:

- King City Permit: 121-203 Issue 5
- Nobleton Permit: 121-102 Issue 4
- Schomberg Permit: 121-101 Issue 4
- Ansnorveldt Permit: 121-104 Issue 4

All MDWLs and DWWPs can be found on the Township's website: https://www.king.ca/township-services/water/water-permits-licences

Regulatory Changes

- In January 2023, Health Canada established a guideline maximum allowable concentration for Malathion of 0.29mg/L. Ontario's already established MAC is more stringent at 0.19mg/L than the Health Canada guideline.
- In March 2023, Health Canada established a guideline maximum allowable concentration for Boron 5mg/L. Ontario's already established MAC is the same as Health Canada guidelines.

FINANCIAL CONSIDERATIONS:

There are no financial implications associated with this report as it is for information purposes only. The water and wastewater budget is fully recoverable from the water and wastewater rate as part of the annual budget process.

ALIGNMENT TO STRATEGIC PLAN:

The 2023-2026 Corporate Strategic Plan (CSP) was adopted by Council on June 12, 2023. The CSP reflects the priorities of upmost importance to the community and defines the obligations and commitments of the Township of King to its citizens and to the public. The CSP is aligned with the Townships long-term vision defined in the "Our King" Official Plan. The CSP also aims to ensure that staff initiatives focus on and work towards supporting King's Vision, Mission and Values.

This report is in alignment with the CSP's Priority Area(s), and/or associated Objective(s) and/or Key Results(s):

Complete Communities	Enrich community well-being and make King the ideal place to live, work and play.in-kind contribution requests by 2024.
Service Excellence	Increase data-driven decision making to improve organizational performance.

The 2023 Summary Reports help to ensure the public and council are aware of the current state of King's drinking water systems and helps to ensure the Township continues to provide safe and reliable drinking water.

CONCLUSION:

The Township of King continues to provide safe municipal drinking water to all our residents, businesses, and visitors through the Ansnorveldt, King City, Nobleton, and Schomberg water distribution systems while meeting or exceeding all regulatory requirements.

ATTACHMENTS:

Ansnorveldt Annual Report (2023)
King City Annual Report (2023)
Nobleton Annual Report (2023)
Schomberg Annual Report (2023)

Prepared By:

Britany Hodge
Environmental Infrastructure and Compliance Supervisor

Prepared By:

Kyle Snell
Manager of Environmental Services

Recommended By:

Samantha Fraser
Director of Public Works

Approved for Submission By:

Daniel Kostopoulos
Chief Administrative Officer

ANNUAL REPORT

Drinking-Water System Number:	**260034372**
Drinking-Water System Name:	Ansnorveldt
Drinking-Water System Owner:	Township of King
Drinking-Water System Category:	Small Municipal Residential
Period being reported:	January 1, 2023 to December 31, 2023

Complete if your Category is Large Municipal Residential or Small Municipal Residential	***Complete for all other Categories.***
Does your Drinking-Water System serve more than 10,000 people? Yes [ ] No [X] **Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No [ ]** **Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.** Township of King 2585 King Road King City, ON L7B 1A1 www.king.ca	**Number of Designated Facilities served:** 0 **Did you provide a copy of your annual report to all Designated Facilities you serve?** **Yes [ ] No [ ]** **Number of Interested Authorities you report to:** **Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?** **Yes [ ] No [ ]**

Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report

List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
N/A	

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?
Yes [ ] No [X] NA

Indicate how you notified system users that your annual report is available, and is free of charge.

[X] Public access/notice via the web

[X] Public access/notice via Government Office
[ ] Public access/notice via a newspaper
[ ] Public access/notice via Public Request
[ ] Public access/notice via a Public Library
[ ] Public access/notice via other method: Report to Council

Describe your Drinking-Water System

Distribution System Class 1
Receives all treated water from Region of York water treatment plant and groundwater wells.
Secondary disinfection is provided through the maintenance of chlorine residual.

List all water treatment chemicals used over this reporting period

Refer to York Region Annual Report for the Ansnorveldt Water Supply System.

Were any significant expenses incurred to?

[ ] Install required equipment
[ ] Repair required equipment
[ ] Replace required equipment

Please provide a brief description and a breakdown of monetary expenses incurred

N/A

Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
N/A					

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period

	Number of Samples	Range of E.Coli Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	N/A				
Treated	N/A				
Distribution	104	Absent	Absent	98	0-48

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report

	Number of Grab Samples	Range of Results (min #)-(max #)
Free Chlorine	218	0.5-2.14
Fluoride (If the DWS provides fluoridation)	N/A	

NOTE: For continuous monitors use 8760 as the number of samples.

***NOTE**: Record the unit of measure if it is **not** milligrams per litre.*

Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument:

Not Applicable

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
N/A				

Summary of Inorganic parameters tested during this reporting period or the most recent sample results. Township values reflect the latest sample. Refer to York Region's Annual Report, available on their website, for complete test results.

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony				
Arsenic				
Barium				
Boron				
Cadmium				
Chromium				
***Lead**				
Mercury				
Selenium				
Sodium				
Uranium				
Fluoride				
Nitrite				
Nitrate				

*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

Summary of lead testing under Schedule 15.1 during this reporting period

(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results - mg/L (min#) – (max #)	Number of Exceedances
Plumbing	N/A		
Distribution	0	N/A	0

Note that all four of the Township Drinking Water Systems are subject to the "exemption" protocols

Summary of Organic parameters sampled during this reporting period or the most recent sample results. Township values an average of the sample results for the Report year. Refer to York Region's Annual Report, available on their website, for complete test results.

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor				
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated metobolites				
Azinphos-methyl				
Bendiocarb				
Benzene				
Benzo(a)pyrene				
Bromoxynil				
Carbaryl				
Carbofuran				
Carbon Tetrachloride				
Chlordane (Total)				
Chlorpyrifos				
Cyanazine				
Diazinon				
Dicamba				
1,2-Dichlorobenzene				
1,4-Dichlorobenzene				
Dichlorodiphenyltrichloroethane (DDT) + metabolites				
1,2-Dichloroethane				
1,1-Dichloroethylene (vinylidene chloride)				
Dichloromethane				
2-4 Dichlorophenol				
2,4-Dichlorophenoxy acetic acid (2,4-D)				
Diclofop-methyl				
Dimethoate				
Dinoseb				
Diquat				
Diuron				

Glyphosate				
Haloacetic Acid (HAA) **(**NOTE**:** show latest running annual average**)**	Dec 4, 2023	10.2	µg/L	None
Heptachlor + Heptachlor Epoxide				
Lindane (Total)				
Malathion				
Methoxychlor				
Metolachlor				
Metribuzin				
Monochlorobenzene				
Paraquat				
Parathion				
Pentachlorophenol				
Phorate				
Picloram				
Polychlorinated Biphenyls(PCB)				
Prometryne				
Simazine				
THM **(**NOTE**:** show latest running annual average**)**	Dec 4, 2023	62.3	µg/L	None
Temephos				
Terbufos				
Tetrachloroethylene				
2,3,4,6-Tetrachlorophenol				
Triallate				
Trichloroethylene				
2,4,6-Trichlorophenol				
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)				
Trifluralin				
Vinyl Chloride				

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards

Parameter	Result Value	Unit of Measure	Date of Sample
THM	61.8	µg/L	2023-03-01
THM	52.2	µg/L	2023-06-05
THM	52.5	µg/L	2023-09-05
THM	82.8	µg/L	2023-12-04

Ontario **Drinking-Water Systems Regulation O. Reg. 170/03**

ANNUAL REPORT

Drinking-Water System Number:	**260005138**
Drinking-Water System Name:	King City
Drinking-Water System Owner:	Township of King
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2023 to December 31, 2023

Complete if your Category is Large Municipal Residential or Small Municipal Residential	***Complete for all other Categories.***
Does your Drinking-Water System serve more than 10,000 people? Yes [ ] No [X] **Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No [ ]** **Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.** Township of King 2585 King Road King City, ON L7B 1A1 www.king.ca	**Number of Designated Facilities served:** **Did you provide a copy of your annual report to all Designated Facilities you serve?** **Yes [ ] No [ ]** **Number of Interested Authorities you report to:** **Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?** **Yes [ ] No [ ]**

Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report

List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
N/A	

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?
Yes [ ] No [X] NA

Indicate how you notified system users that your annual report is available, and is free of charge.

[X] Public access/notice via the web

[X] Public access/notice via Government Office
[ ] Public access/notice via a newspaper
[ ] Public access/notice via Public Request
[ ] Public access/notice via a Public Library
[ ] Public access/notice via other method: Standard of Care, Report to Council

Describe your Drinking-Water System

Distribution System Class 1
Receives treated water from York Region Water System (Lake-Based Water).
Secondary disinfection is provided by chloramination and has been measured as combined chlorine residual (chloramines).

List all water treatment chemicals used over this reporting period

Refer to York Region Annual Report for the King City Water Supply System.

Were any significant expenses incurred to?

[ ] Install required equipment
[X] Repair required equipment
[ ] Replace required equipment

Please provide a brief description and a breakdown of monetary expenses incurred

2023-03-14 Watermain Repair, 270 Forde Cres - $4,992.50
2023-03-21 Watermain Repair, 166 Patricia Dr. - $8,470.00
2023-04-15 Watermain Repair, 47 Patton -$8,842.25
2023-05-09 Watermain Repair, 236 Elizabeth Grove - $7,717.9
2023-06-07 Watermain Repair, 27 Patton - $4,810.98
2023-08-24 Watermain Repair, 142 Manitou Dr. - $4,265.9
2023-10-06 Watermain Repair, King Road and Alex Campbell - $13,959.67
2023-10-16 Watermain Repair, 236 Elizabeth Gr - $10,893.77

Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
2023-07-10	Total Coliforms	Prescence	Absent/ Present	Flush watermain. 1st set of re-samples collected on July 11th. Upstream, downstream and at adverse location. 2nd set of re-samples collected on July 13th. Upstream, downstream and at adverse location. **Adverse Location - S/S 9 James Stokes Court**	2023-07-11
2023-07-10	Total Coliforms	Prescence	Absent/ Present	Flush watermain. 1st set of re-samples collected on July 11th. Upstream, downstream and at adverse location. 2nd set of re-samples collected on July 13th. Upstream, downstream and at adverse location. **Adverse Location - S/S 8 Austin Rumble Court**	2023-07-11
2023-07-17	Total Coliforms	Prescence	Absent/ Present	Flush watermain. 1st set of re-samples collected on July 19th. Upstream, downstream and at adverse location. 2nd set of re-samples collected on July 20th. Upstream, downstream and at adverse location. **Adverse location - S/S 6 Tatton Court**	2023-07-24

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period

	Number of Samples	Range of E.Coli Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	N/A				
Treated	N/A				
Distribution	208	Absent	Absent - Present	89	0-12

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report

	Number of Grab Samples	Range of Results (min #)-(max #)
Chloramine	382	0.87 – 2.51 (Combined)
Fluoride (If the DWS provides fluoridation)	N/A	

NOTE: For continuous monitors use 8760 as the number of samples.

***NOTE**: Record the unit of measure if it is **not** milligrams per litre.*

Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
Schedule C of License 121-103 Issue 3.	NDMA	2023-03-01	0.0009	µg/L
		2023-06-05	0.001	
		2023-09-05	0.0009	
		2023-12-04	0.0009	

Summary of Inorganic parameters tested during this reporting period or the most recent sample results. Township values reflect the latest sample. Refer to York Region's Annual Report, available on their website, for complete test results.

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony				
Arsenic				
Barium				
Boron				
Cadmium				
Chromium				
***Lead**				
Mercury				
Selenium				
Sodium				
Uranium				
Fluoride				
Nitrite				
Nitrate				

*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

Summary of lead testing under Schedule 15.1 during this reporting period
(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results - mg/L (min#) – (max #)	Number of Exceedances
Plumbing	N/A		
Distribution	0	N/A	None

Note that all four of the Township Drinking Water Systems are subject to the "exemption" protocols

Summary of Organic parameters sampled during this reporting period or the most recent sample results. Township values an average of the sample results for the Report year. Refer to York Region's Annual Report, available on their website, for complete test results.

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor				
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated metobolites				
Azinphos-methyl				
Bendiocarb				
Benzene				

Benzo(a)pyrene				
Bromoxynil				
Carbaryl				
Carbofuran				
Carbon Tetrachloride				
Chlordane (Total)				
Chlorpyrifos				
Cyanazine				
Diazinon				
Dicamba				
1,2-Dichlorobenzene				
1,4-Dichlorobenzene				
Dichlorodiphenyltrichloroethane (DDT) + metabolites				
1,2-Dichloroethane				
1,1-Dichloroethylene (vinylidene chloride)				
Dichloromethane				
2-4 Dichlorophenol				
2,4-Dichlorophenoxy acetic acid (2,4-D)				
Diclofop-methyl				
Dimethoate				
Dinoseb				
Diquat				
Diuron				
Glyphosate				
Haloacetic Acid (HAA) (NOTE: show latest annual average)	2023-12-04	8.8	µg/L	None
Heptachlor + Heptachlor Epoxide				
Lindane (Total)				
Malathion				
Methoxychlor				
Metolachlor				
Metribuzin				
Monochlorobenzene				
Paraquat				
Parathion				
Pentachlorophenol				
Phorate				
Picloram				
Polychlorinated Biphenyls(PCB)				
Prometryne				
Simazine				
THM (NOTE: show latest annual average)	2023-12-04	20.4	µg/L	None
Temephos				
Terbufos				
Tetrachloroethylene				

2,3,4,6-Tetrachlorophenol				
Triallate				
Trichloroethylene				
2,4,6-Trichlorophenol				
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)				
Trifluralin				
Vinyl Chloride				

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards

Parameter	Result Value	Unit of Measure	Date of Sample
N/A			

Ontario **Drinking-Water Systems Regulation O. Reg. 170/03**

ANNUAL REPORT

Drinking-Water System Number:	**260002577**
Drinking-Water System Name:	Nobleton
Drinking-Water System Owner:	Township of King
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2023 to December 31, 2023

Complete if your Category is Large Municipal Residential or Small Municipal Residential	***Complete for all other Categories.***
Does your Drinking-Water System serve more than 10,000 people? Yes [ ] No [X] **Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No [ ]** **Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.** Township of King 2585 King Road King City, ON L7B 1A1 www.king.ca	**Number of Designated Facilities served:** **Did you provide a copy of your annual report to all Designated Facilities you serve?** **Yes [ ] No [ ]** **Number of Interested Authorities you report to:** **Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?** **Yes [ ] No [ ]**

Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report

List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
N/A	

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?
Yes [ ] No [X] NA

Indicate how you notified system users that your annual report is available, and is free of charge.

[X] Public access/notice via the web

[X] Public access/notice via Government Office
[ ] Public access/notice via a newspaper
[ ] Public access/notice via Public Request
[ ] Public access/notice via a Public Library
[ ] Public access/notice via other method: Standard of Care, Report to Council

Describe your Drinking-Water System

Distribution System Class 1
Receives all treated water from Region of York water treatment plant and groundwater wells. Secondary disinfection is provided through the maintenance of chlorine residual.

List all water treatment chemicals used over this reporting period

Refer to York Region Annual Report for the Nobleton Water Supply System.

Were any significant expenses incurred to?

[ ] Install required equipment
[ ] Repair required equipment
[ ] Replace required equipment

Please provide a brief description and a breakdown of monetary expenses incurred

N/A

Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre

There were no reportable incidents in the Nobleton DWS

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
N/A					

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period

	Number of Samples	Range of E.Coli Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	N/A				
Treated	N/A				
Distribution	357	Absent	Absent	97	0-4

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report

	Number of Grab Samples	Range of Results (min #)-(max #)
Chlorine	527	0.76-2.82
Fluoride (If the DWS provides fluoridation)	N/A	

NOTE: For continuous monitors use 8760 as the number of samples.

***NOTE**: Record the unit of measure if it is **not** milligrams per litre.*

Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument:

Not Applicable

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure

Summary of Inorganic parameters tested during this reporting period or the most recent sample results. Township values reflect the latest sample. Refer to York Region's Annual Report, available on their website, for complete test results.

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony				
Arsenic				
Barium				
Boron				
Cadmium				
Chromium				
***Lead**				
Mercury				
Selenium				
Sodium				
Uranium				
Fluoride				
Nitrite				
Nitrate				

*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

Summary of lead testing under Schedule 15.1 during this reporting period
(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results - mg/L (min#) – (max #)	Number of Exceedances
Plumbing	N/A		
Distribution (Alkalinity)	0	N/A	0

Note that all four of the Township Drinking Water Systems are subject to the "exemption" protocols

Summary of Organic parameters sampled during this reporting period or the most recent sample results. Township values an average of the sample results for the Report year. Refer to York Region's Annual Report, available on their website, for complete test results.

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor				
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated metobolites				
Azinphos-methyl				
Bendiocarb				
Benzene				

Benzo(a)pyrene				
Bromoxynil				
Carbaryl				
Carbofuran				
Carbon Tetrachloride				
Chlordane (Total)				
Chlorpyrifos				
Cyanazine				
Diazinon				
Dicamba				
1,2-Dichlorobenzene				
1,4-Dichlorobenzene				
Dichlorodiphenyltrichloroethane (DDT) + metabolites				
1,2-Dichloroethane				
1,1-Dichloroethylene (vinylidene chloride)				
Dichloromethane				
2-4 Dichlorophenol				
2,4-Dichlorophenoxy acetic acid (2,4-D)				
Diclofop-methyl				
Dimethoate				
Dinoseb				
Diquat				
Diuron				
Glyphosate				
Haloacetic Acid (HAA) Running annual average	Dec 4, 2023	8	µg/L	None
Heptachlor + Heptachlor Epoxide				
Lindane (Total)				
Malathion				
Methoxychlor				
Metolachlor				
Metribuzin				
Monochlorobenzene				
Paraquat				
Parathion				
Pentachlorophenol				
Phorate				
Picloram				
Polychlorinated Biphenyls(PCB)				
Prometryne				
Simazine				
THM (NOTE**:** show latest annual average**)**	Dec 4, 2023	25.2	µg/L	None
Temephos				
Terbufos				
Tetrachloroethylene				

2,3,4,6-Tetrachlorophenol				
Triallate				
Trichloroethylene				
2,4,6-Trichlorophenol				
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)				
Trifluralin				
Vinyl Chloride				

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards

Parameter	Result Value	Unit of Measure	Date of Sample
N/A			

Ontario **Drinking-Water Systems Regulation O. Reg. 170/03**

ANNUAL REPORT

Drinking-Water System Number:	**260005151**
Drinking-Water System Name:	Schomberg
Drinking-Water System Owner:	Township of King
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2023 to December 31, 2023

Complete if your Category is Large Municipal Residential or Small Municipal Residential	***Complete for all other Categories.***
Does your Drinking-Water System serve more than 10,000 people? Yes [ ] No [X] **Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No [ ]** **Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.** Township of King 2585 King Road King City, ON L7B 1A1 www.king.ca	**Number of Designated Facilities served:** **Did you provide a copy of your annual report to all Designated Facilities you serve?** **Yes [ ] No [ ]** **Number of Interested Authorities you report to:** **Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?** **Yes [ ] No [ ]**

Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report

List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
N/A	

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?
Yes [ ] No [X] NA

Indicate how you notified system users that your annual report is available, and is free of charge.

[X] Public access/notice via the web

[X] Public access/notice via Government Office
[ ] Public access/notice via a newspaper
[ ] Public access/notice via Public Request
[ ] Public access/notice via a Public Library
[ ] Public access/notice via other method: Standard of Care, Report to Council

Describe your Drinking-Water System

Distribution System Class 1
Receives all treated water from Region of York water treatment plant and groundwater wells. Secondary disinfection was provided by chloramination and has been measured as combined chlorine residual (chloramines).

List all water treatment chemicals used over this reporting period

Refer to York Region Annual Report for the Schomberg Water Supply System.

Were any significant expenses incurred to?

[ ] Install required equipment
[ ] Repair required equipment
[ ] Replace required equipment

Please provide a brief description and a breakdown of monetary expenses incurred

N/A

Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
Apr-11-2023	Combined Chlorine	4.2	mg/L	Retook Chlorine residuals at every sample station in the DWS. Contacted Region to determine chlorine output (determined to be normal at around 3.4 mg/L at the time)	Apr-13-2023
Jul-17-2023	Total Coliform	Presence	Absent/ Present	Flush watermain. 1st set of re-samples collected on July 19th. Upstream, downstream and at adverse location. 2nd set of re-samples collected on July 20th. Upstream, downstream and at adverse location. **Adverse location - S/S 2 Cooper Dr**	Jul-19-2023
Jul-17-2023	Total Coliform	Presence	Absent/ Present	Flush watermain. 1st set of re-samples collected on July 19th. Upstream, downstream and at adverse location. 2nd set of re-samples collected on July 20th. Upstream, downstream and at adverse location. **Adverse Location - SS 6 End of Roselena**	Jul-19-2023

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period

	Number of Samples	Range of E.Coli Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	N/A				
Treated	N/A				
Distribution	207	Absent	Absent-Present	97	0-560

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report

	Number of Grab Samples	Range of Results (min #)-(max #)
Chloramine	384	1.66-4.20
Fluoride (If the DWS provides fluoridation)	N/A	

NOTE: For continuous monitors use 8760 as the number of samples.

*Regulatory Relief granted by MECP for Max. Concentration of Chloramines of 4.0 mg/L per Schedule D of License 121-101 Issue 4.

***NOTE**: Record the unit of measure if it is **not** milligrams per litre.*

Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
Schedule C of License 121-101 Issue 4.	NDMA	Mar-01-2023	0.0009	µg/L
		Jun-07-2023	0.0011	
		Sep-05-2023	0.0015	
		Dec-04-2023	0.0009	
Schedule C of License 121-101 Issue 4.	Nitrite	Mar-01-2023	0.48	mg/L
		Jun-05-2023	0.54	
		Sep-05-2023	0.49	
		Dec-04-2023	0.5	

Summary of Inorganic parameters tested during this reporting period or the most recent sample results. Township values reflect the latest sample. Refer to York Region's Annual Report, available on their website, for complete test results.

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony				
Arsenic				
Barium				
Boron				
Cadmium				
Chromium				
***Lead**				
Mercury				
Selenium				
Sodium				
Uranium				
Fluoride				
Nitrite	Dec-04-2023	0.5	mg/L	None
Nitrate	Dec-04-2023	<0.5	mg/L	None

*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

Summary of lead testing under Schedule 15.1 during this reporting period
(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results - mg/L (min#) – (max #)	Number of Exceedances
Plumbing	N/A		
Distribution (Alkalinity)	0	N/A	None

Note that all four of the Township Drinking Water Systems are subject to the "exemption" protocols

Summary of Organic parameters sampled during this reporting period or the most recent sample results. Township values an average of the sample results for the Report year. Refer to York Region's Annual Report, available on their website, for complete test results.

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor				
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated metobolites				
Azinphos-methyl				
Bendiocarb				

Benzene				
Benzo(a)pyrene				
Bromoxynil				
Carbaryl				
Carbofuran				
Carbon Tetrachloride				
Chlordane (Total)				
Chlorpyrifos				
Cyanazine				
Diazinon				
Dicamba				
1,2-Dichlorobenzene				
1,4-Dichlorobenzene				
Dichlorodiphenyltrichloroethane (DDT) + metabolites				
1,2-Dichloroethane				
1,1-Dichloroethylene (vinylidene chloride)				
Dichloromethane				
2-4 Dichlorophenol				
2,4-Dichlorophenoxy acetic acid (2,4-D)				
Diclofop-methyl				
Dimethoate				
Dinoseb				
Diquat				
Diuron				
Glyphosate				
Haloacetic Acid (HAA) Running annual average	Dec-04-2023	8.6	µg/L	None
Heptachlor + Heptachlor Epoxide				
Lindane (Total)				
Malathion				
Methoxychlor				
Metolachlor				
Metribuzin				
Monochlorobenzene				
Paraquat				
Parathion				
Pentachlorophenol				
Phorate				
Picloram				
Polychlorinated Biphenyls(PCB)				
Prometryne				
Simazine				
THM (NOTE**:** show latest annual average**)**	Dec-04-2023	4.9	µg/L	None
Temephos				
Terbufos				

Tetrachloroethylene				
2,3,4,6-Tetrachlorophenol				
Triallate				
Trichloroethylene				
2,4,6-Trichlorophenol				
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)				
Trifluralin				
Vinyl Chloride				

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards

Parameter	Result Value	Unit of Measure	Date of Sample
Nitrite	0.54	mg/L	Jun-05-2023